

shp Jan 16

Work Order ID 78093

78093

Page 1

December-28-11 3:31:57 PM

Item ID: D3830-2KGY

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Vertical Tunnel Upper, RH

Start Date: 28/12/2011 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 16/01/2012 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan: M.C.J.

Date: 11/12/20 Tooling:

Date:

Run Start *NR1*

QC:

Date: SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D3830	A
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100		0.00							
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100

HandThermo

Memo

0.00

Hand Finishing Thermoforming

1-Cut Sheet to required Blank size

x1

DR

12/01/10

105

0.00

105

HandThermo

Dry Material

Memo

0.00

Hand Finishing Thermoforming

Dry Sheet as per QSI022 KYDEX

Temp: 150°F

Time IN: 7:00 am 12/01/09

Time OUT: 5:00 am 12/01/10

x1

DR

12/01/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

December-28-11 3:31:57 PM

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Page 2

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N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 28/12/2011 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 16/01/2012 **Req'd Qty:** 1.00 *** 1 ***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

110

0.00

110

0.00

Thermoform

Thermoforming Machine

Memo

1-Machine Set-Up

2-Pre-heat Tool to required temp.

3-Thermoform as per Dwg and Folio #FTA055 using tool DT9319

Dwg Rev: Δ

Folio Rev: 2

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120

0.00

QC

Quality Control

Memo

Visually inspect part for proper formation and texture

130

QC8- Inspect parts - second check

0.00

130

0.00

QC

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

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Page 3

N900040100

Setup Start *NS1*

Stop ***NS2***

Start Date: 28/12/2011 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 16/01/2012 **Req'd Qty:** 1.00 *** 1 ***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
 QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NR2***

140 0.00

0.00

1-Trim to finished dimensions as per Dwg

QC2- Inspect parts off machine FAI/FAIB

0.00

Memo

0.00

Complete FAI document

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 78093***78093***

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December-28-11 3:31:57 PM

Item ID: D3830-2KGY

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Vertical Tunnel Upper, RH

Start Date: 28/12/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 16/01/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	Identify as per dwg & Stock Location: _____	0.00							
170									
Packaging	Memo	0.00							
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							
Quality Control									

12/1/16

12/1/16

mf
12-01-16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

December-28-11 3:32:01 PM

Page 1

Work Order ID: 78093

78093

Parent Item: D3830-2KGY

D3830-2KGY

Parent Item Name: Vertical Tunnel Upper, RH

Start Date: 28/12/2011

Required Date: 16/01/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA: New issue DD verified by:EC
Add Step 105 Dry Material 10/04/21 DL

IPP Rev. B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MKYD6185S.080-P3-52068		Purchased	No				sf	1,011.893		1.5			

MKYD6185S 080-P3-52068

Kydex steel grey

**

Location

therm

Loc Qty

1011.893107

10.4896282

1001.40348

Loc Code

111807

119476

12/01/11

1.5

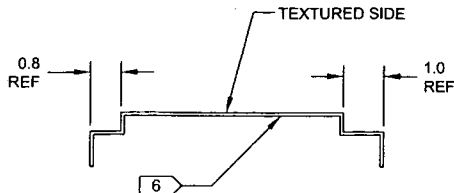
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

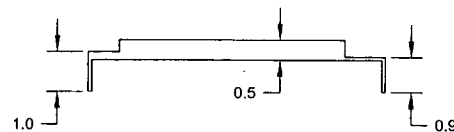
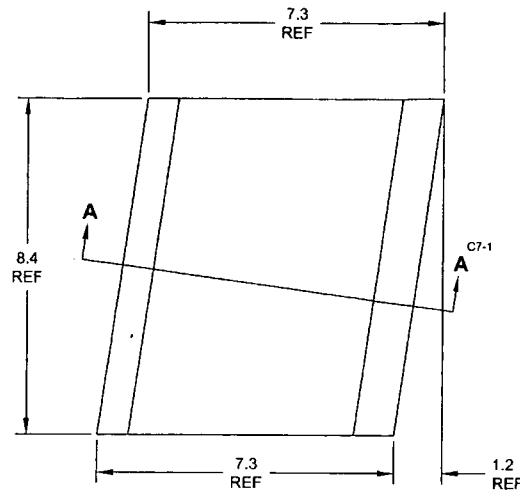
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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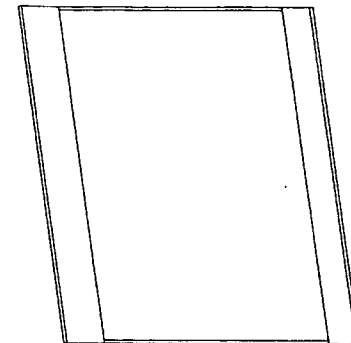
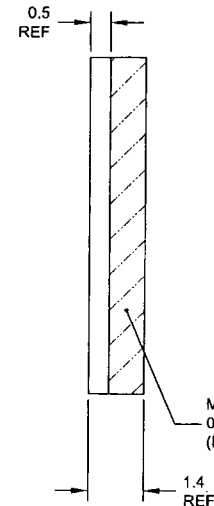
NOTE: Date & initial all entries



SECTION A-A C4-1



D3830-1 VERTICAL TUNNEL, UPPER L/H



SHOP COPY
RETURN TO
ENGINEER
UNCONTROLLED
SUBJECT TO APPROVAL
WITHOUT NOTICE
WORK COPY
NO. **78093 M.C.J**
11/12/20

RELEASED
(signature)

NOTES:

- 1) MATERIAL: SEE TABLE
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N (SEE TABLE) USING VIBRATING STYLUS
- 7) WEIGHT: 0.3 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9318 PER DART QSI 022. TRIM PER MOLD.
- 9) MINIMUM THICKNESS: 0.050" UNLESS OTHERWISE NOTED

PART NUMBER	DESCRIPTION
D3830-1KIV	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, IVORY #62015 (MKYD6185S.080-P3-62015)
D3830-1KGY	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, STEEL GRAY #52068 (MKYD6185S.080-P3-52068)

A	NEW ISSUE	PH	09.06.12
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.06.12		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. REV. A
D3830 SHEET 1 OF 2
TITLE SCALE
VERTICAL TUNNEL (206 L3/L4) NTS

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

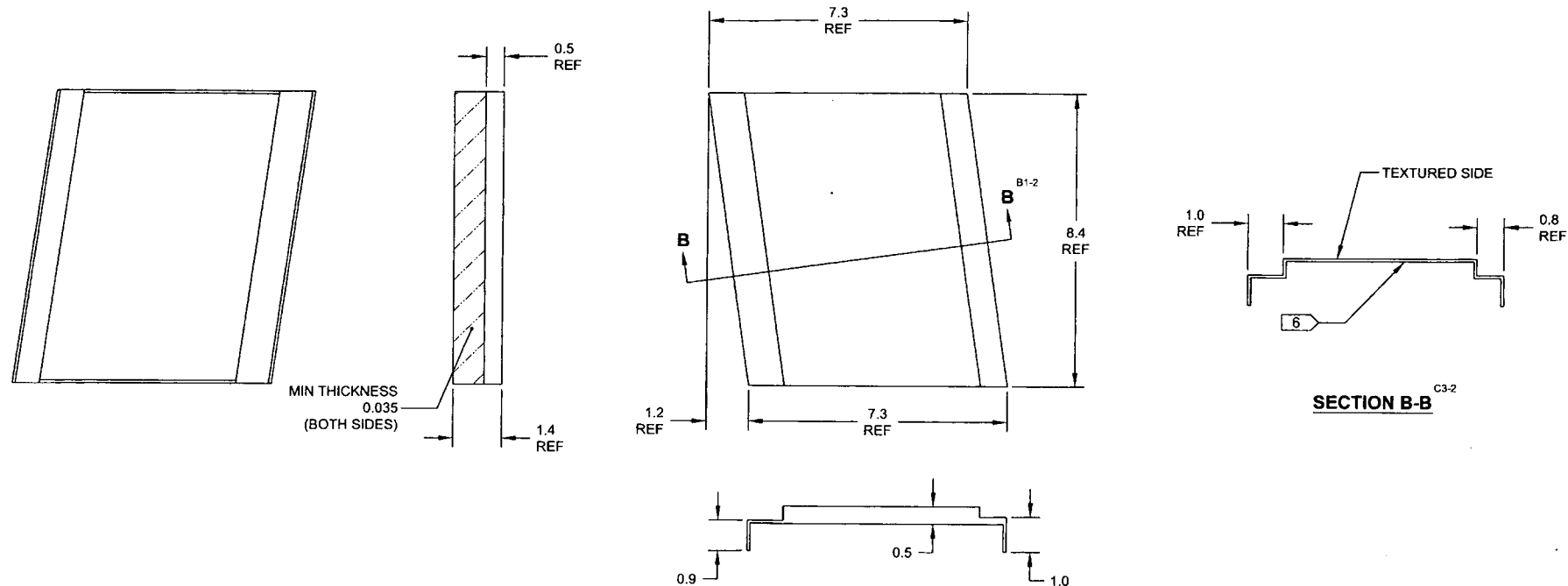
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

78093



D3830-2 VERTICAL TUNNEL, UPPER R/H

RELEASED
59/06/12 NHP

NOTES:

- 1) MATERIAL: SEE TABLE
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N (SEE TABLE) USING VIBRATING STYLUS
- 7) WEIGHT: 0.3 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9319 PER DART QSI 022. TRIM PER MOLD.
- 9) MINIMUM THICKNESS: 0.050" UNLESS OTHERWISE NOTED

PART NUMBER	DESCRIPTION
D3830-2KIV	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, IVORY #62015 (MKYD6185S.080-P3-62015)
D3830-2KGY	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, STEEL GRAY #52068 (MKYD6185S.080-P3-52068)

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3830	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		VERTICAL TUNNEL (206 L3/L4)	NTS
DATE	09.06.12	COPYRIGHT © 2009 BY DART AEROSPACE LTD	
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 78093
Description:	Part Number: 03830-2K6Y
Inspection Dwg: 03830 Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST
THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than $\frac{1}{8}$ "	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: <i>DL</i>	Date: 12/01/10
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TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
9.4	Ref.	9.4"	✓		TAPE DL-01	
7.3	Ref.	7.25"	✓		TAPE DL-01	
0.9"	± 0.100"	0.99"	✓		VEN DL-02	
1.0"	± 0.100"	1.042"	✓		VEN DL-02	
0.5"	± 0.100"	0.58"	✓		VEN DL-02	
0.050	M.N.	0.076"	✓		ULTRA	

Measured by: <i>DL</i>	Date: 12/01/11
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Audited by: <i>S</i>	Date: 12/01/15
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Preliminary Approval:	Date:
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Rev	Date	Change	Revised by	Approved
B	10.04.14	Added preliminary approval	KJ	

10.04.14